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The Contemporary Musician and the Production of Knowledge: Practice, Research, and Responsibility

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Music as knowledge

The very notion of artistic research suggests that some form of new knowledge might spring from such an activity. Before confronting the thornier question of specifically musical knowledge, we must at least consider that such an idea presupposes the broader possibility of cultural knowledge: the understanding or potential for transformation—shared or individual, lasting or temporary—that is a response to cultural activity. We might even suggest that the generation of such knowledge is the function (or evidence) of cultural behaviour. The activity of musicians, then, is to engage on some level with the production of cultural knowledge. Irreducible to *epistêmê* or *technê*, cultural knowledge requires a context, some degree of common experience, however tacit or individually interpreted, if it is to enter the stream of cultural consciousness. "Research" suggests reflection—the search for knowledge rather than its incidental generation. The knowledge production inherent in reflective musical practices becomes and needs to become more explicit at certain moments of cultural evolution—and I suggest that the present is such a moment. This emerging-into-discourse entails some kind of bidirectional mapping or projection as part of such a mediated percolation of ideas—hence the naturally multidisciplinary nature of artistic research. Our technology-informed moment is also particular in this respect: the mapping, transposition, and re-representation of structures, data, or concepts is a key operator of contemporary culture.

Reflective musicians find themselves surrounded by a universal culture—allowing for historical extinction and geographical ignorance—with which they have to form some kind of relationship, and yet any knowledge they make of it must be grounded in their own

time and place. Following Giorgio Agamben and Alain Badiou, I suggest that we inhabit a cultural environment of fragmentation, a glorious but potentially disempowered kaleidoscope of overlapping interests, tastes, and traditions in which both the academy and the state have withdrawn from judgements of intrinsic value and criticism is impoverished. The common connoisseurship on which the concept of canon is predicated is clearly no longer a viable concept. Identities—interests, pursuits, allegiances, and understandings—are individual, complex, overlapping, and dynamic.[1] My contention is that the production of knowledge is the natural work of music—or, less ambitiously, of Western art music—and that in this present environment the work of musicians must be to address its need for a context, however local, in which to emerge.

This knowledge is generated and shared within a wider cultural economy that the musician has to navigate ever more consciously; the artist becomes a self-defining node in multiple, dynamic networks. This chapter therefore takes an analogous approach, triangulating the position of the reflective musician from several perspectives: contemporary creative practice in its professional and technological environments, changes in cultural and academic structures, the evolving role of musicians and understandings of the nature of knowledge. Artistic research, it suggests, is the appropriate response of musicians to a world that while purporting to respect difference also fosters fragmentation. As a common undertaking, it constitutes a new and potent form of assembly.[2]

Musical practices and the production of knowledge

Practice—continuity and present

Practice is an individual, embodied, situated, consistent process that has continuity independent of a particular manifestation, an adaptability to materials, brief, and context, and a capacity to co-evolve with them. It is the behaviour of *homo faber*, "a point of view" rather than repetition, as McCullough (1996, 246) suggests. This implies a degree of autonomy and reflective self-knowledge; to extend the computational metaphor we might imagine an individual practice as a virtual model of potential behaviour, managed,

[1] This idea is expanded in Malouf (2000).

[2] Butler's "performative theory of assembly" could usefully be explored in this context: "resistance has to be plural and it has to be embodied" (Butler 2015, 217).

maintained, and observed through its various interactions.[3] The practitioner maintains and manages a more-or-less conscious or detailed image of his or her practice that is to a degree autonomous of both his or her own moment-to-moment state and of any particular material or object, is adaptive and evolving, in which the practitioner can intervene and on which he or she can reflect. To allow for the possible near-identity of practice and object, let us refer to an *instantiation*. The space, however slight, between practice and instantiation, however virtual, is the locus of first-stage reflection.

While their contextual regimes and modes of output may vary, the imagining of past, distant, or future worlds are not qualitatively different practices in this respect. Improvisation, historically informed performance, composition, and musicology can be regarded as commensurable; they are acts of imagination instantiated in a shared present. Whatever their apparent material or mode of output, their truth will be tested in that same present. They have access to the same repertory of conceptual models—that of their own moment—which they seek to extend by acts of imagination; research is a practice just as practice may be research. I will propose that in order not to resign music to infinite difference and fragmentation, reflective practice must remain aware of its role in encouraging the emergence of knowledge structures that may have relevance beyond the immediate scope of a particular situation. To this end, two requirements present themselves: an ethical approach to individual projects, and wider-ranging study of the epistemology of music and its dynamics in a global culture.

Economies of knowledge

Musicians participate in an economy of knowledge, therefore. Like any economy in a phase of perceived instability, speculation, black markets, and forgeries will be rife; the self-preserving dynamics of the economy itself would tend to dominate over the interests of the society it serves. The economy of cultural knowledge is just as subject to these pressures as that of culture itself. Making reflective practice look like research as recognised in other fields becomes an exercise in its own right; musical knowledge has to take non-musical

[3] I have suggested elsewhere that the interactive computer-embodied work constitutes an appropriate paradigm for contemporary practice (Impett 2011). McCullough (1996) shows how contemporary digital practices are contiguous with more physical manifestations.

forms. Flights of taste, fiction, and virtuosity are validated by context and costume; their cloaking in the white coat of science does not free them from assumption, agenda, and display. Peer review and funding body appraisal are tests of process, not knowledge. At the same time, our wider understanding of how knowledge is constituted is evolving to incorporate aspects of musical experience. Notions such as "embodied" or "enacted" knowledge suggest—to draw a musical parallel—that what we think of as propositional knowledge is a particular and useful case within a broader spectrum of human knowledge, just as the work-(almost)-as-text is a particular and remarkable instance of human music-making.

The work of music

The modernist obligation

The development of practice as a potential research activity needs to be considered from the perspective of practitioners, of musicians. The work of musicians is structured socially; that is, musicians work together (even if—as in the artificial limit case of the ivory-tower composer—some of that contact may be conceptual rather than material, and transposed in time) and in some kind of cultural context. These social and working structures are intimately linked with the production of cultural knowledge. It is interesting to trace the development of the perceived responsibility of musicians to produce new knowledge. At certain points in the humanist–enlightenment–modernist trajectory, some musical activity—particularly theory-informed composition—has been implicitly understood as research. At the end of the sixteenth century Zarlino may have been a conservative, but was so precisely because his view of the past was one of continual progression. In the preface to the last great manual of Western common practice, the *Harmonielehre*, Schönberg (1922, v–viii) passes to students the obligation to see beyond their teachers. That musical activity has the obligation to modify itself according to ceaseless self-criticism is an ideological modernism that persists, even if its statements are local, contextual, or relational. In this respect, we might see Western science itself as a modernist project and the adoption of notions of research in the arts as a way of maintaining the modernist credentials of Western artistic practices when style is no longer a marker. From Zarlino to Xenakis, accounts of musical practice in a particular present locate themselves historically; they ground

themselves in an unhearable past and seek to address an unknowable future. As our relationship with musics of other times and places has expanded, so has the potential territory of the reflective musician, of *musica speculativa*. For Zarlino, *musica speculativa* and *musica prattica* were indivisible.[4] For his near-contemporary Banchieri (1601, A3r), human frailty makes their combination rare and sometimes superficial. Banchieri was not only a great musical humorist but also a pragmatist. As we shall suggest, pragmatism can not only hide laziness of thought or lack of vision, it can also be an instrument for the repression of ideas, for the impeding of cultural evolution. In this respect, Banchieri represents our challenge.

Roles and identity

Through most of the twentieth century, musicians were able to make productivity-enhancing assumptions about their context. Much musical development was predicated on a relatively stable cultural context: a balance of the infrastructure of musical life, state support (directly, through broadcasters or education), the recording industry, and an effective cross-subsidy with the commercial music industry. Simplistically put, the role of their work required little explanation to its immediate constituencies; the historical continuity of cultural structures validated their associated practices.

Through the second half of the twentieth century, musical practices became more explicitly reflective. Developments such as those of historically informed performance and the emergence of an understanding of composition as inherently an activity of research—investigating technical, technological, cultural, and cognitive challenges and possibilities—could be seen as contiguous with historical modernism. They are parallel manifestations of an underlying current (see, e.g., Adorno 2002; Harnoncourt 2005). During the same period a social, global view of music-making has led to an understanding of music as a universal human *behaviour* rather than a particular set of texts or conventions (Blacking 1974; Ingold 2007; Small 1998), while an individual, cognitive view has led to an understanding of the common mechanisms of its embodiment (see, e.g., Levitin 2007; Hallam, Cross, and Thaut 2009).

[4] Zacconi ([1622] 1983) expands on the relationship at greater length.

Over recent decades the cultural roles of musicians and their activities have become less clear than previously; no less important—indeed probably yet more urgent—but more complex, more conditional or contingent. Many factors have contributed to this, but we might identify a recoiling from elitism, the questioning of a canon and a reticence to judge value or importance, the dissolving of the remnant behaviours of high bourgeois culture, and the impact of cultural relativism on Western art music. Crucially, the stability of cultural context is eroded even where there would appear to be continuity of structure: the concert hall, the opera house, the broadcaster. Contexts for meaning, for the production of knowledge, are open to renegotiation in each instance. Apparent stability preserved the integrity and distinctiveness of professional roles and categories: performer/composer, art/commercial music, live/recorded, academic/practitioner. Cultural and technological evolution has illuminated the artificiality of such distinctions, dissolving both barriers and supports. Anyone professing music—rather than having a circumstantial relationship with a particular practice—is obliged to construct their own set of relationships. As in other fields, material and knowledge economies are increasingly intertwined on a personal level. The reflective practitioner constructs and navigates a unique network of musical languages, cultural discourses, and social structures. Musicians now have to reflect more consciously on their places, roles, the nature of their musical activities, and their relationships with musics and practices from many other times and places, as well as the sources and rationales for their incomes. Once seemingly the preserve of visionary composers, performers and critics, a critical stance is now a common property of musicians. They are obliged to situate themselves as a node in multiple musical, discursive, and economic networks.

Tasks and truth

The task of the musician thus becomes to bring this musical activity into a shared present, to identify and cultivate a context local to the event in which new knowledge might emerge. Musical knowledge, in this sense, is not a "knowing that" accessible to formal logic, nor is it mystical or transcendental, but rather material understanding that takes place in the musical domain. Badiou suggests that we should acknowledge the distinction between different modes of knowledge and the limits on their remapping or translation. In his search

for a path forwards based on events of common understanding rather than infinite difference, Badiou proposes an *ethic of truths*. A truth, Badiou (2001) suggests, "proceeds *in* the situation" (42), it is an event in addition to "what there is" (41); "To enter into the composition of a subject of truth can only be something that *happens to you*" (51). "Rather than link [ethics] to abstract categories . . . it should be referred back to particular *situations*" (3). A truth not only is situated and personal but also requires "eventual fidelity" of the subject. For Deleuze and Guattari (1988, 316), the artist may be "the first person to set out a boundary stone, or to make a mark," but such marks are made individually; their cultural effects are subsequent emergent structures. The sharing of a truth is thus a vital part of its status as truth. According to Badiou, there are different kinds of truth—those of science, politics, love, and art—between which there may be analogies or associations but not translations. I would propose that we add musical truth to this list (this is not the place to debate what other distinctions might be introduced), and that to demystify music, to relieve it of its historically inherited burden of the sublime, we count musical truths as instances of musical knowledge.

Following Badiou, we might tentatively propose some maxims concerning musical knowledge:

All musical knowledge is generated in a present (whenever the music was created).

All reflective engagement with music is creative (whatever form it takes).

Musical knowledge is both embodied and distributed through culture and technology.

The primary mode of musical knowledge is musical.

The environment for artistic research

Structures and values

Changes in the roles of musicians have been driven by external circumstances as much as aesthetic vision. The sources of funding for music—commercial, in cultural life, and in education—are not only reduced, their criteria have changed radically over two generations. Globalisation and the drive to productivity have transformed the work of musicians in ways not dissimilar to other forms of production. The identification of and adaptability to new constituencies, flexibility of production, quantifiability and accountability, and the explicit addressing of broader external concerns and constraints

have all become as important for the practice of musicians as in the conduct of business. These inform musicological insight and experiment as much as brilliance of performance, compositional inventiveness, technological innovation, or cultural planning. Funding comes from the market—which depends on celebrity, feeding established taste, or confirming established knowledge—or from funding organisations whose decisions are informed by parameters such as those of the UK government's *Green Book* guidelines on appraisal and evaluation (HM Treasury 2003). The notion of "willingness to pay"—the degree to which society is willing explicitly to channel resources—is as unavoidable for the practice of music as for every other area. In all cases this is a withdrawal from musical value judgement, such that musicians must cultivate second-order parameters in order to do their work. The "evidence" for musical knowledge requires extra-musical mediation; the methodologies of other disciplines or representations in other media are unavoidable. While artistic research distinguishes itself from less contextualising artistic development, this new context might be seen as a way for society to support wider cultural evolution on the basis of shared relevance rather than taste or market.

Transposition and transdisciplinarity

Thus the apparent making explicit of knowledge produced through musical activity is in every case a mapping to knowledge of a different kind. It becomes transposable, separated from its shared present, but by the same token affords shared reflection and is subject to examination. Most importantly, in this dehydrated, pasteurised form it can become an ingredient in the production of musical knowledge in another context. Thus mediated, it can become part of a wider discourse, subject to open reflection and investigation, and inform other modes of practice and understanding. In every case, an extramusical state mediates between instances of musical knowledge. This does not mean that musical knowledge becomes propositional knowledge. Rather, each remapping, each bringing-to-discourse, contributes to a broader cultural dynamic within which the potential for musical knowledge evolves.

Navigating the landscape

For artist-researchers the landscape may be wider and more accessible, but it is also more complicated to navigate. This is the state of there being no "outside" described by Negri (2011, 108): "Both from the intensive and from the extensive point of view, the artistic paradox consists today in the wish to produce the world (bodies, movements) *differently*—and yet *from within* a world which admits of no other world other than the one which actually exists, and which knows that the 'outside' to be constructed can only be *the other within an absolute insidedness*."

Negri's summary recalls Badiou's analysis: a series of infinite difference attempts to build relationships with a world of increasing homogeneity. Ultimately, Negri is unlikely to be entirely correct: future agenda-serving reductive narratives will identify various "outsides." What is more likely is that the density of cultural interconnectedness occludes such edges. The extent of a boundaryless field of potential activity is vertiginous. At the same time, the constraints of well-formed research encourage solipsism: self-reference between work and mapping, between analysis and discourse, methodology or discipline.[5] This informs the role of the creating-researching subject; he or she has a perceived obligation to avoid "outsides," but in the process such elements go to ground, bury themselves in discourse and assumption—the fuel of deconstruction. We might reframe the issue thus: reflective musicians have to establish clear critical distance with their work without either compromising their personal investments or constructing artificial conceits. Lyotard (1997, 235) takes a broader view: "The West is that civilization that questions its essence as civilization. The singularity of Western civilization resides in this questioning, which in return endows it with a universal import—or so it claims." As production and reflection both proliferate and fragment, they need to become more closely related in order to maintain this crucial relationship between creation, re-creation or interpretation, and self-questioning. Ultimately this resides in the practice–research nexus. Critical, aesthetic, and

[5] There is another important avenue to be pursued here. We might see the apparent common sense and reasonableness of the anglophone, Anglo-Saxon discourse within which the notion of practice-as-research has evolved—perhaps as much to explicitly attach research to its object as to intellectually validate practice, as both seek new rationales within vertiginous cultural change—as a rhetorical device, a sophistry designed to repress and dismiss creative thought and progress. Its very apparent pragmatism may be what makes it slippery. I would not presume to develop such an argument in a context such as this.

technical discourse cannot form any kind of unitary relationship with the whole range of musical activity that constitutes our cultural world; their ties with practice have to be closer and relate to a specific locus of thought or action. *Musica teorica* can no longer offer truths without reference to *musica prattica*. The challenge is then to avoid a collection of mutually validating pairs, connected only by methodological analogy, and instead to encourage and observe the emergence of broader structures of musical meta-knowledge with their own dynamics.

Knowledge and interface

As Bourdieu ([1983] 1993, 35) has pointed out, "The production of discourse . . . about the work of art is one of the conditions of production of the work." Without this, art becomes "derealised," separated from any system within which it produces knowledge. Rancière describes the embedding context—discourse, value systems, cultural structures—as a *regime* (see, e.g., Rancière 2013). In the absence of a single clear regime, art must bring with it the conditions for constructing its own. The musician-researcher seeks to build an interface integral to each instance of musical knowledge, one that will connect not only with other subjects but also with other interfaces. The output of musical artistic research is an interface—the paradigmatic artefact of our time, as Herbert Simon (1996, 6) observed—that relates an inner environment to an outer environment.

The nature of practice-research: craft and knowledge-production

Modes of production

Negri considers the nature of work in general in this new space. Artistic activity always reflects the modes of production within which it takes place and of which it is an instance. He describes labour as becoming more immaterial and cognitive. Labour and artistic production become each other's subject, he says. "Their subject and object refer to each other, in a game which is precisely that of production, and in which there is no longer an 'outside'" (Negri 2011, 113). Intelligence, technique, and labour enter a new relationship, a view echoing interpretations of Marx's *Praxis* (see, e.g., Bernstein 1971). Negri (2011, 110) describes this as a *Kunstwollen*, the desire to make art that is "an intentionality that renews its own epoch." The work of art exists within its contemporary mode of production;

it is both commodity and activity. This is as true for an essay or a performance as a composition; we have established above that contemporary creative practice in its widest form encompasses the past, the distant, and the future. The present is as specious in art as in mind. Negri develops an idea of communication as an integral element of contemporary labour. Communicating the imaginary and real spaces that their work inhabits is thus integral to the work of creative practitioners. As Negri points out, however, the components of a networked world are not ineffable; the networks are real and technological, and at their nodes are communities of people who have established some shared concern. In the absence of an "outside" the creative act exists as an event, a singularity. If knowledge is to develop broader momentum, the practitioner must connect to an outside and demonstrate their contiguity with other productive and receptive practices. This "moment of the recognition of the common" forms part of Negri's (2011, 121) vision of contemporary artistic practice.

Present contexts for production

Let us artificially distinguish these two modes of production—musical knowledge specific to musical experience and more transposable, transportable cultural knowledge—that in the case of artistic research are the result of the same activity. They act within a single *habitus*; Bourdieu's (1990, 53) comprehensive explication of his term uses an appropriately musical metaphor:

> The conditionings associated with a particular class of conditions of existence produce *habitus*, systems of durable, transposable dispositions, structured structures predisposed to function as structuring structures, that is, as principles which generate and organize practices and representations that can be objectively adapted to their outcomes without presupposing a conscious aiming at ends or an express mastery of the operations necessary in order to attain them. Objectively "regulated" and "regular" without being in any way the product of obedience to rules, they can be collectively orchestrated without being the product of the organizing action of a conductor.

We are seeking through practices to refine our sense of our own habitus—to understand our world and to enable music to play its part. To this end practices must reflect

on how they relate to one another, how they constitute an authentic common habitus. Both musical and broader cultural modes of knowledge production inhabit a compound contemporary discourse defined by more or less informal discourses such as critical theory, media theory, technology, cognition, histories, and cultural relativism. The patterns and dynamics of the distribution of knowledge are what distinguish our broader embedding discourse from those of other times (the rhetoric, theology, and counterpoint of Bach; the revolution, aesthetics, and tonal perspective of Beethoven). In our contemporary case it leads to a close relationship between creative and research activities. In terms of the present topic, we might see a networked world as constituted of knots of the work of cultural knowledge production and musical knowledge production, inseparable for reasons we shall pursue below.

Their common work within a technologised, networked environment suggests a notion of *craft*, which resurfaces more strongly now than at any point since the nineteenth-century bifurcation of culture into industrialised, commodified production on the one hand and the work of genius on the other. Craft—whether of creation, invention, analysis, criticism, or interpretation—implies a degree of continuity, of rehearsal, of shared practice irreducible to a set of rules. The notion of craft suggests an adaptive, evolving set of heuristics and experience, tools and models, responsive to materials and project while guarding against the arbitrary interventions of taste. It also suggests that knowledge might emerge from the relationship between craftsperson, tools, techniques, materials and context; that through practice new knowledge might emerge that was inaccessible to conscious reflection prior to the process. Ingold (2011, 53) refers to "the processional quality of tool use" in the practice of skill; in this respect, theoretical, technical, and generative models are tools as much as are a hammer or a clarinet. Informal, unreflected models are as significant as theory or technique, and their study is a key element of artistic research. Technology provides the common medium for these practices, however transparently. We return to remapping, the transferring of information from one domain or mode of perception to another, as a key characteristic of an informational world, one that distinguishes it from other cultural moments. Paradigms and practices have evolved within this world that have become our natural frameworks for the production of knowledge. McCullough (1996) describes the emergence of digital craft within the adaptive symbolic

environments of new technologies as "dense notational contexts for action" (99) and shows how new shapes of community develop through the distribution of digital craft (252).

Present knowledge

This same technological environment restores the potential for *presence* to the instantiation and distribution of musical and cultural knowledge. Technology can be used to generate a sense of immediacy, situatedness, and responsiveness in music-making, when even live performance of "classical" music can seem an act of commodified reproduction. In interactive technological environments, for example, we can situate complex and contingent musical events and experiment with ways of mapping the notational or symbolic back to musical reality. As Vattimo has pointed out, the virtual provides a path to a new real, "a deep and unprecedented transformation of the very 'principle of reality'" (Vattimo 2005), whereas what he perceives as a current call for evidence-based "reality" is an instrument of conformism, of confining knowledge to barracks (Vattimo 2012). The conditions of what Lyotard (1991, 50) calls a "telegraphic art"—art at a distance in time and space—allow for the distribution of a shared present across place and at different moments. This has implications for common aesthetic experience and for the development of knowledge, which we will consider below. What concern us here are two complementary properties of this environment: that it allows the emergence of communities, however temporary, that are geographically fragmented; and that the event or knowledge can be instantiated dynamically, adaptively, in response to local conditions. Above, we discussed the role of acts of imagination in reflective creative practice. The general state of contemporary knowledge is that produced by *simulation*, whether in acts of imagination or through technology. That is, a knowledge event can be considered to be such when it can be shared—reinstantiated in another mind or system, a process that requires some degree of local reconfiguring. DeLanda (2011, 18) suggests that we consider singularities of such knowledge in terms of the "spaces of possibility" that they define; the stability of emergent properties is in the fact that their possibility spaces share the same structure. Concepts from a technological world thus suggest mechanisms for the communication, sharing, or "outside world" imperatives identified above.

The present space

Technological music and sound art, reflecting as they do the modes of production of our time, can clearly be understood in these terms. But what of other forms of musical practice and research? What of the performance and understanding of earlier music, for example? We return to the principle above: all musical knowledge occurs in a present. Specialisation in various self-defining areas of cultural knowledge militates against acknowledgement of this fundamental idea. It is important to regard the full extent of this activity as a single "field" (Bourdieu's term is perhaps the least contentious): ". . . a *field of forces*, but . . . also a *field of struggles* . . ." (Bourdieu [1983] 1993, 30). Such a field doubtless embodies internal articulation and asymmetries, but, if we are to investigate the dynamics of musical knowledge, it must be considered as a whole. The science-derived metaphor of DeLanda is anticipated by the analysis of Bourdieu, who describes acts within a field as "position-taking . . . defined in relation to the *space of possibles*" (ibid.).

Practice and theory

Different modes of knowledge become homologous when they are effectively the same activity; the mapping almost becomes commutable. Barthes's writing a novel in the course of his lectures at the Collège de France might be an example (Barthes 2011). When both derive from words this situation is more conceivable; Cage's lectures on music perhaps come closest—the late *How to Get Started*, for instance, which we can still hear (see Cage 2010). In the same context, visual artist Anselm Kiefer (2011) considered taking a similar approach to Barthes. Ultimately he was thwarted, but this very non-identity led him to consider the relationship between practice and public reflection. Two important points emerge. First, that practice and theory are not always in the same phase relationship. There are instances when the possibility of knowledge through practice is predicated on the dissemination of theory; Kiefer cites certain aspects of mediaeval religious painting as relying on prior knowledge to do their work as art, for example. Second, while we can consider scientific knowledge to be cumulative, to progress unidirectionally, this is not the case for the knowledge produced through art. We might understand the consequences of these ideas in terms of a historical materialist perspective: given the complex cultural

context, it may be necessary for theory to precede practice in a constellation of loci in order for artistic knowledge to continue to do its consciousness-expanding work.

An ethics for practice-research in music

Art and fragmentation

Both Badiou and Agamben look at the paradox of the seemingly reduced power of art in a culture that has seen it liberated and proliferate to the point of ubiquity. The mystery they address can be paraphrased thus: if the potential power of art was so clear to Plato that the role of the artist had to be clearly circumscribed for the sake of society, why with our apparent freedoms is it now so peripheral to human behaviour? If there is such a diversity of free creative thought in contemporary art, why are alternative voices less instrumental than ever in economics and politics? Badiou and Agamben both see fragmentation as the challenge. In their view, society is encouraged to see acts of creation and imagination—potential cultural knowledge, including musical knowledge—as singularities, as elements in a succession of difference. This militates against the emergence of wider, new, shared understanding and protects the status quo. Badiou views this as an instrument of power and repression, Agamben as a stage of cultural evolution.

For Badiou, the problem is a culture predicated on difference, a faux respect for the individual that prevents the emergence of consensus structures—the democratic deficit identified by Hardt and Negri (2005). The potentially common search for understanding through art is so individualised, so dissipated that it loses all its potential social energy. Badiou (2006, 148) puts forward an alternative programme, an *affirmative aesthetics* that proceeds from the artist's responsibility to seek truths based on commonality. Agamben (1999a) sets out from a different perspective. He considers the nature of the work and the task of the artist, and finds "the end of the poem" inevitable; the creative work as previously construed is no longer possible. However, in acknowledging this, the artist becomes "a man without content." The artist serves in his or her work to give form to the common contemporary experience of confronting the silence as a *space of potential* (Agamben 1999a, 65; 1999b). The very striving to create or grasp new cultural knowledge is the common human experience upon which new kinds of shared knowledge might be

predicated. Such a view is clearly rooted in a Gramscian consciousness-raising interpretation of culture, but how do subjective truths relate to wider consciousness?

Cultural emergence

Artistic research focuses—quite appropriately—on the specifics of an instance. Whether inventing anew or attempting to understand and bring to life from afar, the seeking after musical knowledge involves some kind of transformation of the individual through immersion in and rehearsal of mental and physical processes that have been imagined but not yet fully realised. Analogously, critical theory tends to concentrate on the individual subject, work, or relationship. Such focus militates against cultural evolution unless a plane exists on which cultural emergence can take place. We should therefore pay attention to ways in which to encourage the emergence of broader knowledge patterns from the close, reflective, contextualising relationship of practice and research. Indeed, we might see this as the responsibility of each individual project. The study of the dynamics of musical meta-knowledge, of which the present book is an example, is vital. To paraphrase Franco Moretti (2013), the reflective, detailed close listening of artistic research needs to be balanced by "distant listening."

Badiou (2001, 44–45) addresses this need on the basis of ethics, in terms that reflect both this crucial relationship between personal, embodied, lived experience and wider cultural consciousness:

> What I will call, in general, the "ethic of a truth" is the principle that enables the continuation of a truth-process—or, to be more precise and complex, *that which lends consistency to the presence of some-one in the composition of the subject induced by the process of this truth*. . . . The "some-one" thus caught up . . . is simultaneously *himself* . . . and *in excess of himself*, because the uncertain course of fidelity *passes through him*, transfixes his singular body and inscribes him, from within time, in an instant of eternity.

Negri (2011, 117) arrives at an analogous formulation:

> we have to specify the multitudinarian event [the product of contemporary "cognitive labour"] as an excedence [a surplus] which opens to the common. . . . All production is consequently an event of communication; and the common is achieved through multitudinarian events. And this is how it comes about, this capacity to renew the mechanisms of knowledge and action which—today, in the epoch of cognitive labour—we call artistic.[6]

Despite complexities of language, both writers are showing how a truth-event based on sameness can derive from a singular event characterised by difference. If a singular event is to be shared in a way sufficiently analogous that it can become part of a wider cultural-musical discourse, such a mechanism is vital—the interface mentioned above. The knowledge must embody the means of its own communication. This duality is at the heart of the activity of practice-as-research; exposing the commonality of individual events of musical knowledge is one of its responsibilities. The work of artistic research is not only to explore new spaces but also to construct appropriate interfaces. According to David Couzens Hoy, critical theory converges on an ethics precisely in its duty to maintain a resistant potential. Developing ideas from Levinas and Derrida, Hoy (2004, 182) sees a form of ethical resistance "as the resistance of the completely powerless." He explores an analogous paradox at the heart of ethics: the potential contradiction between ethical responsibilities towards the one and towards the whole. It is only in the close ethical relationship between a research activity and the musical truths to which it relates that wider knowledge can emerge. The duty of "eventual fidelity" is therefore to a particular path to a musical truth (from an observation, a clue or an intuition, whether realised or not, and an individual process, a practice) rather than to a discipline, a methodology, or an institution.

Praxis and mimesis

We might understand the mediating property of this truth relationship as a form of mimesis and artistic research as embodying a double bind of poiesis and praxis. Agamben (1999a, 68–93) traces the relative roles of Aristotelian concepts of poiesis and praxis through the

[6] The translation is not helpful. The "multitudinarian" addresses the multitude. "Excedence" would appear in translations from French as "surplus."

development of Western aesthetics. For him, their relationship was inverted as praxis—rooted in the condition of "man" as a living being—gained the upper hand in the shape of the assertion of will. One might see certain theories of embodiment as continuations of this line. Poiesis, by contrast, Agamben (ibid., 73) describes as "a mode of truth . . . of the unveiling that produces things from concealment into presence." This is the opposite of the imposition of will. It is inherently a process of research, guided—no less than in the case of science—by an unrealised seed of understanding and sought by means of the design and application of a process. The difference lies in the mode of knowledge produced; musical knowledge has a quasi-quantum nature in that its being experienced and being observed are in an inextricable relationship. Its presence is not falsifiable, and it can only be discussed by taking the observer, the act of observing, into account.

Rancière takes issues with what he sees as Badiou's and Agamben's dismissal of the relevance of aesthetics. He does so mistakenly, I believe—they are concerned rather with re-empowering aesthetic experience—but on this basis he raises some interesting arguments. He sees the emergence of a common discourse of aesthetics as the moment when the knot of a threefold regime of poiesis, mimesis, and aesthesis—which he describes as the *representative regime*—was untied: "this knot had tied together a productive nature, a sensible nature and a legislative nature called *mimesis* or representation. . . . With this end [of mimesis], the muses cede their place to music, that is to a relation without mediation between the calculus of the work and the pure sensible affect" (Rancière 2009, 7).

Perhaps we could see practice/research as a new form of mimesis, proper to each instance; practice as the mediation between calculus and affect. Ethics, says Rancière, is "the kind of thinking in which an identity is established between an environment, a way of being and a principle of action" (ibid., 110). He warns against the illusory ethical turn of aesthetics that polarises consensus art—the product of art's perceived responsibility to its audience (rights to art)—with the avant-garde, which is responsible to bear infinite witness to contradictions (rights of art). Here we are rather proposing an ethics of practice—a way of being and principle of action—that preserves the nature of musical knowledge, "giving back to these inventions their status as cuts that are always ambiguous, precarious, litigious" (ibid., 132). This double bind of practice and reflection is acknowledged by Agamben (1999a, 61) in his reading of a Platonic view of the aesthetic sphere as "a

condition in which manual and intellectual labor are not yet divided"; it occupies a unique truth-telling place prior to sophistry or taste.

Emerging discourse

How might we imagine the structure, the network of practice-research nodes from which new patterns might emerge? Individual practices are sustained, constrained, coherent, focussed activities. In what way does the knowledge generated through one practice materially affect the environment for others? We could see this in terms of a distributed frame problem. Wheeler (2005) considers the problem in the context of embodied–embedded cognitive science—at the heart of the compound contemporary discourse described above. He contrasts a Cartesian decontextualised view of an intelligent agent (the musician-researcher in this case) with a Heideggerian, context-bound understanding, proposing a model of coupled dynamical systems generating evolving behaviour that exhibits "multiple interacting factors of various kinds and . . . self-organization" (ibid., 245–46). New structure—new knowledge—thus contributes materially to the behaviour of existing knowledge systems, not just their context or data. This could be criticised as a standard strong emergentist view; that is, the behaviour and role of such a meta-system depends on the standpoint and agenda of the observer. However, we are considering precisely a case wherein each "intelligent agent" is seeking not to identify definitive solutions but to evolve his or her own practice.

Such a cultural process requires a discourse, a common resource of ideas and models. Stengers (2011) considers the repertoire of new concepts that have emerged from recent scientific research to inform wider cultural discourse—not only new intellectual constructs but also evolving models of thought. They inevitably inform and figure in the compound, informal discourse of current humanities research described above. She sees a politics of modes and instances of knowledge. Stengers proposes an *ecology* of such models, referring to Latour's ecological regime that "sorts not so much practices as the ways in which those practices are liable to present themselves, to be present for others" (ibid., 394). She posits a distinction between blinkered *experts* and *diplomats*, the negotiators who explore the deterritorialisation of fields and categories. The broader cultural assimilation, negotiation, and evolution of new concepts she describes as a

"cosmopolitical parliament." Experts and practitioners have the responsibility to bring their new knowledge into this informal public forum, she says, to participate in the debate. Crucially, such knowledge is always to be understood as situated in time, "relative to a present that new diplomats or experts will bring to pass" (ibid., 396). This situation will require of each practice that it participate on the production of meta-knowledge: "The cosmopolitical parliament 'exists' today occasionally, but precariously and improvisationally, without memory and without any long-term consequences, the way a microbubble forms in a liquid just below the boiling point. It cannot be stabilized, cannot exist, in the ecological sense, without the active, engaged, risk-filled production of practices that create knowledge about practices, capable of narrating the way they differ and matter" (ibid., 405).

Conclusion

Perhaps the notion of artistic research should ideally be redundant. It runs the risk of reifying the equation as an exception, of validating the non-reflective forms of both expressions. Rather, we should encourage musical practices—whatever their mode of output—that are reflective, self-aware, that acknowledge their own historical-cultural context, and that afford debate and evolution. Practice is a sustained, individual trajectory based on knowledge and imagination—whether past, distant, or future—that can lead to the instantiation of music knowledge in a shared present. Whatever metaphor we choose as a model for this parliament—dynamical system, space of possibilities, potential space—the researching agents that constitute it have a triple responsibility: to represent the musical knowledge that their practice may (or may not) generate as truthfully as possible as cultural knowledge, to do so in a manner that allows it to find commonalities with other practices, however unrelated they may appear in their detail, and to participate in the wider common project of observing structures emerge through that process. "To discover what is common even in what is different," as Gadamer (1986, 12) defines the task of philosophy.

We might therefore argue for a return of the muse, not as a source of inspiration but as an object of obligation. Music is the most ubiquitous of the arts and yet, to paraphrase Schönberg (1974, 94) a hundred years ago, comparatively few people are able to understand what music has to say from a purely musical point of view. The fact that in

every mapping of musical knowledge to another domain it loses some essence is an indicator of its subversive potential. Music is a form of resistance that touches the edge of human materiality. The alignment of particular instances of knowledge production with the activity of research as understood in other domains is proper to our present circumstances. The knowledge achieved through practice-focussed research affords common reflection, analysis and re-use. It provides a mirror in which to see musical truths. By surveying the field of reflections as a whole, ignoring received divisions, we might see new constellations emerge.

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